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Date: June 17, 1999

Sir:

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Inventor(s): Robert Springer et al;

For: PC KEYBOARD WITH DETACHABLE SMARTCARD SECURITY DEVICE

XX	5 Sheets of Drawing(s) are enclosed.
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**IBM Corporation
Personal Systems Group
Dept. 9CCA/Bldg. 002-2
3039 Cornwallis Road
P.O. Box 12195
Research Triangle Park, NC 27709**

Respectfully submitted,

By: Bernard D. Bogdon
 Bernard D. Bogdon
 Registration No. 24,773
 Telephone No. (919) 543-4753

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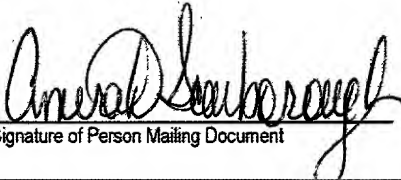
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INVENTORS: Robert E. Springer
David W. Hill
Susan Moffatt
John D. Swansey

PC KEYBOARD WITH DETACHABLE SMARTCARD SECURITY DEVICE

CROSS REFERENCE TO RELATED APPLICATIONS

This patent document has been filed concurrently with and is cross referenced to assignee's related patent specifications Serial Number _____ (RP9-99-602).

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to a personal computer keyboard combined with desktop personal computer accessory for accessing data and operation of a personal computer, and more particularly to a keyboard having attached thereto a smartcard security device.

2. Description of the Problem

Personal computer desktop clutter is a constant problem. Accessory devices often utilized with personal computers (PCs) often times are stored or placed alongside or in close proximity to the PC but are not defined or limited to an area where they are readily accessible and where they are least likely to be damaged and can maintain their integrity without the likelihood of becoming contaminated through normal usage and debris which is often times present on the surface of a desktop or on or near a keyboard utilized with a PC.

BRIEF SUMMARY OF THE INVENTION

It is a purpose of this invention to provide a readily accessible PC accessory in a secure and readily identifiable space and in close relationship with a PC operator. The accessory is attachable to the keyboard and preferably on the backside of the keyboard in a location which does not interfere with the operation of the PC or the keyboard by the operator. Preferably the accessory device, such as a Smartcard security kit, is attached in a semi-permanent manner in order for it to easily attached and detached. A Smartcard is common in the marketplace and units which receive these are likewise common and are known to include the necessary structure, intelligence and circuitry to provide the functions in common and wide use. The card may be used for banking online allowing the user to make secure transactions without using a credit card. It may also be used as a security device, which along with a password, could secure the software and/or operation of the PC or any of its functional components. The attachment location for the accessory is preferably on the far or back side of the keyboard and conveniently disposed at either end of the keyboard. The attachment of the kit or other accessory is accomplished by, for example, a clip which can snap ON and OFF from the keyboard readily with ease and without taking a great deal of time or effort and in such a way that it can be accomplished in an intuitive manner without the

operator needing to study or closely observed the accomplishment of the task by the operator's self.

BRIEF DESCRIPTION OF THE DRAWINGS

Some of the purposes of the invention having been others will appear as the following description proceeds, when taken in connection with the accompanying drawings, in which:

5 **Figure 1** is a perspective view of a PC accessory device with an attachment clip for attaching to a PC keyboard, according to the principles of the present invention;

Figure 2 is a back elevational view of the PC accessory device with the attachment clip;

10 **Figure 3** is a view of the back side of a PC keyboard with the PC accessory with the attachment clip for connecting to access aperture in the keyboard;

Figure 4 is a view of the PC keyboard and PC accessory device attached to the keyboard according to the principles of the present invention; and

Figure 5 is a front view of the PC keyboard and PC accessory device attached to the keyboard according to the principles of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

While the present invention will be described more fully hereinafter with reference to the accompanying drawings, in which preferred embodiments of the present invention are shown, it is to be understood at the outset of the description which follows that persons of skill in the appropriate arts may modify the invention here described while still achieving the favorable results of this invention. Accordingly, the description which follows is to be understood as being a broad, teaching disclosure directed to persons of skill in the appropriate arts, and not limiting upon the present invention.

Figure 1 illustrates a PC Smartcard utility kit 10 which includes the Smartcard reader 12 and an attachment unit 14, illustrated in **Figure 1** as a clip device 16.

The Smartcard reader 12 has an outer case which defines a slot 18 for receiving a typical Smartcard, standard in the industry but not illustrated, and further defines a passage 20 for dressing an electrical cord connection between the PC Smartcard kit 10 and an electrical connection and jack in any PC circuit or unit. The clip device 16 is structured to slide upward, in the direction of arrow head 22, into the body or the outer case of Smartcard holder 12 and to be locked into place to dispose outwardly the two legs 24 and 26 of the clip 28 which are formed as part of the clip device 16. The clip device 16, as further illustrated in **Figure 2**, can, for example, be structured to lock into the backside of the Smartcard holder 12, but is also devised to be able to be disconnected, in favor of an alternate assembly which can replace the clip device 16, but function to secure the Smartcard holder 12 securely in place in close proximity of the keyboard 30, as illustrated in **Figure 3**, or to connect directly to a keyboard.

The attachment unit 14, as is illustrated in **Figures 1 and 2**, can be the clip device 16, or some other alternative embodiment such as a unit which includes a material suitable for securing fastening of the accessory or for providing a clinging or

holding ability, such as the material Velcro, to hold the accessory in position. The body or outer case of the accessory can be formed to define an area for placement or location of the alternative attachment material or structure. The clip device 16, can be suitable formed of a compatible plastic substance in order to provide for flexibility of the legs 24 and 26 of the clip device 16 as the legs are inserted or extracted from openings or slots, such as keyboard openings 32 and 34, as shown in **Figure 3** and provided for receiving clip device 16 legs 24 and 26, respectively. Although plastic materials provide for ease of manufacturing, low cost, esthetic considerations, like color and texture, other materials can provide for like or suitable attachment mechanisms. Metal, fabric, adhesive, magnetic fabrications are just some possibly alternatives.

In **Figure 3**, arrow head 36 shows the direction and manner of attachment of the Smartcard utility kit 10 to the keyboard 30. The respective legs 24 and 26 of the clip device 16, are guided into the accommodating openings 32 and 34 at the back side of the keyboard 30 and by design snap into place. However, it should be understood that by the very nature of the illustrated clip device 16 and its legs 24 and 26, the clip device 16 can be detached from the keyboard 30 without destruction or deterioration of either unit. This operation can be accomplished an endless number of times. Likewise it should be understood that alternate attachment assemblies can be provided to dress the accessory to the keyboard as provided for by the subject invention.

Figures 4 and 5 illustrate the Smartcard utility kit 10 from the rear of the keyboard 30 and from the front of the keyboard 30 and show the units properly combined and dressed one to the other.

In the drawings and specifications there has been set forth a preferred embodiment of the invention and, although specific terms are used, the description thus given uses terminology in a generic and descriptive sense only and not for purposes of limitation.

We Claim:

1. A PC accessory unit for attachment to a PC keyboard, comprising:
a body structure incorporating electronic circuitry for operation in combination
with a PC; and
the body structure having a connecting assembly for attachment externally to a
PC keyboard.

2. The PC accessory unit as defined in Claim 1, wherein the connecting assembly
is a clip for attachment to a PC keyboard.

3. The PC accessory unit as defined in Claim 2, wherein the clip has two prongs for
insertion into openings in a PC keyboard.

4. The PC accessory unit as defined in Claim 3, wherein the accessory unit is a
Smartcard utility kit.

5. The PC accessory unit as defined in Claim 4, wherein the clip of the Smartcard
utility kit is inserted into keyboard openings.

6. A PC accessory unit in combination with a PC keyboard, comprising:
a PC accessory unit having a body structure incorporating electronic circuitry for
operation in combination with a PC;
the PC accessory body structure having a connecting assembly for attachment
externally to a PC keyboard; and
a keyboard for receiving the connecting assembly of the PC accessory unit to
dress the PC accessory unit and the keyboard in combination and attached to each
other.

7. The PC accessory unit in combination with the PC keyboard, as defined in
Claim 6, wherein the PC accessory unit is a Smartcard utility kit.

1 8. The PC accessory unit in combination with the PC keyboard, as defined in
2 Claim 7, wherein the connecting assembly for attachment of the PC accessory unit
3 externally to the keyboard is a clip for attachment to the keyboard.

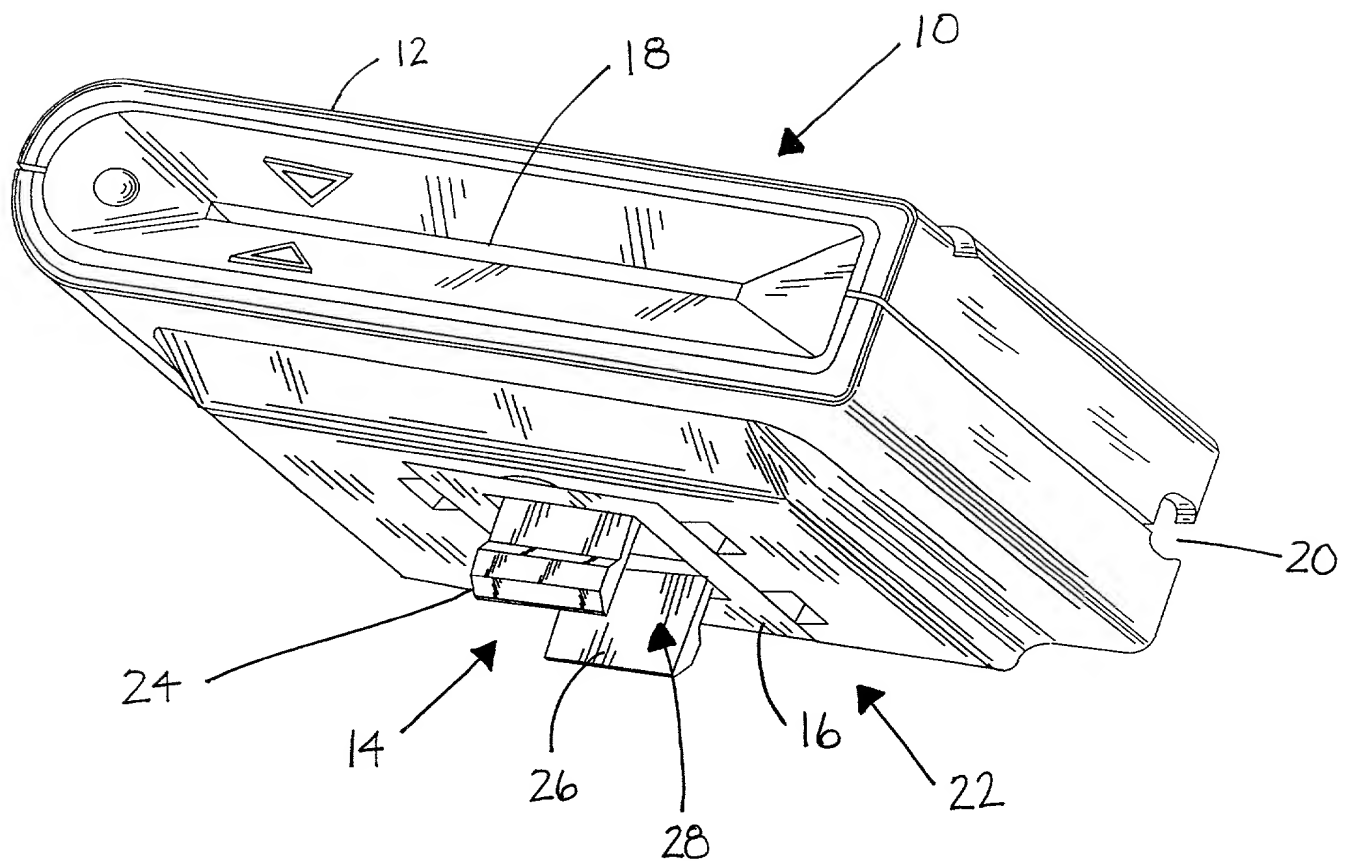
1 9. A PC accessory unit in combination with a PC keyboard, comprising:
2 a PC accessory unit having a body structure incorporating electronic circuitry for
3 operation in combination with a PC;
4 the PC accessory body structure having a connecting assembly, including a clip,
5 for attachment externally to a PC keyboard; and
6 a keyboard for receiving the connecting assembly and clip of the PC accessory
7 unit to dress the PC accessory unit to the backside of the keyboard to form the units in
8 combination and attached to each other.

1 10. A PC accessory unit in combination with a PC keyboard, comprising:
2 a PC accessory unit having a body structure for holding a device for use in
3 combination with a PC;
4 the PC accessory body structure having a connecting assembly, including a clip,
5 for attachment externally to a PC keyboard; and
6 a keyboard for receiving the connecting assembly and clip of the PC accessory
7 unit to dress the PC accessory unit to the backside of the keyboard to form the units in
8 combination and attached to each other.

ABSTRACT

1 The combination of a PC accessory, such as Smartcard utility kit , attached, for
2 example, by a clip to the backside of PC keyboard to provide for readily accessible
3 usage of both the PC accessory and the keyboard and to not introduce structure which
4 interferes with the operator's interaction with the keyboard and PC, while maintaining
5 the accessory unit in a secured and dressed location for proper maintenance of a PC
6 desktop.

FIG. 1



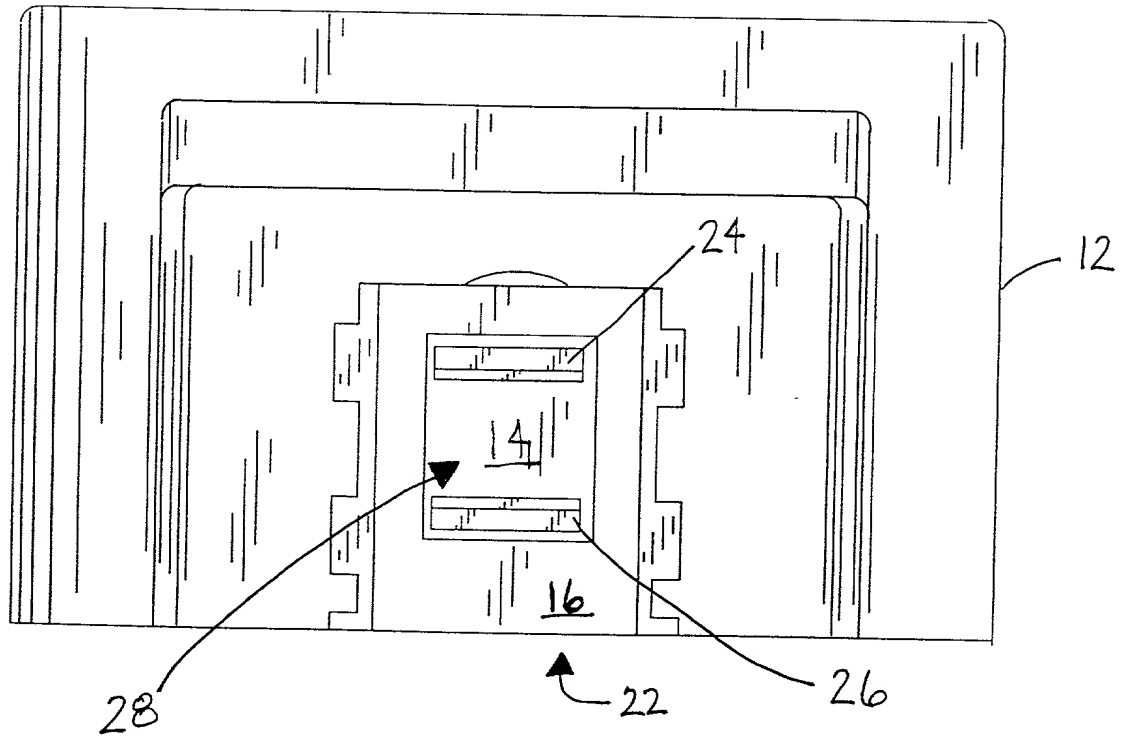


FIG. 2

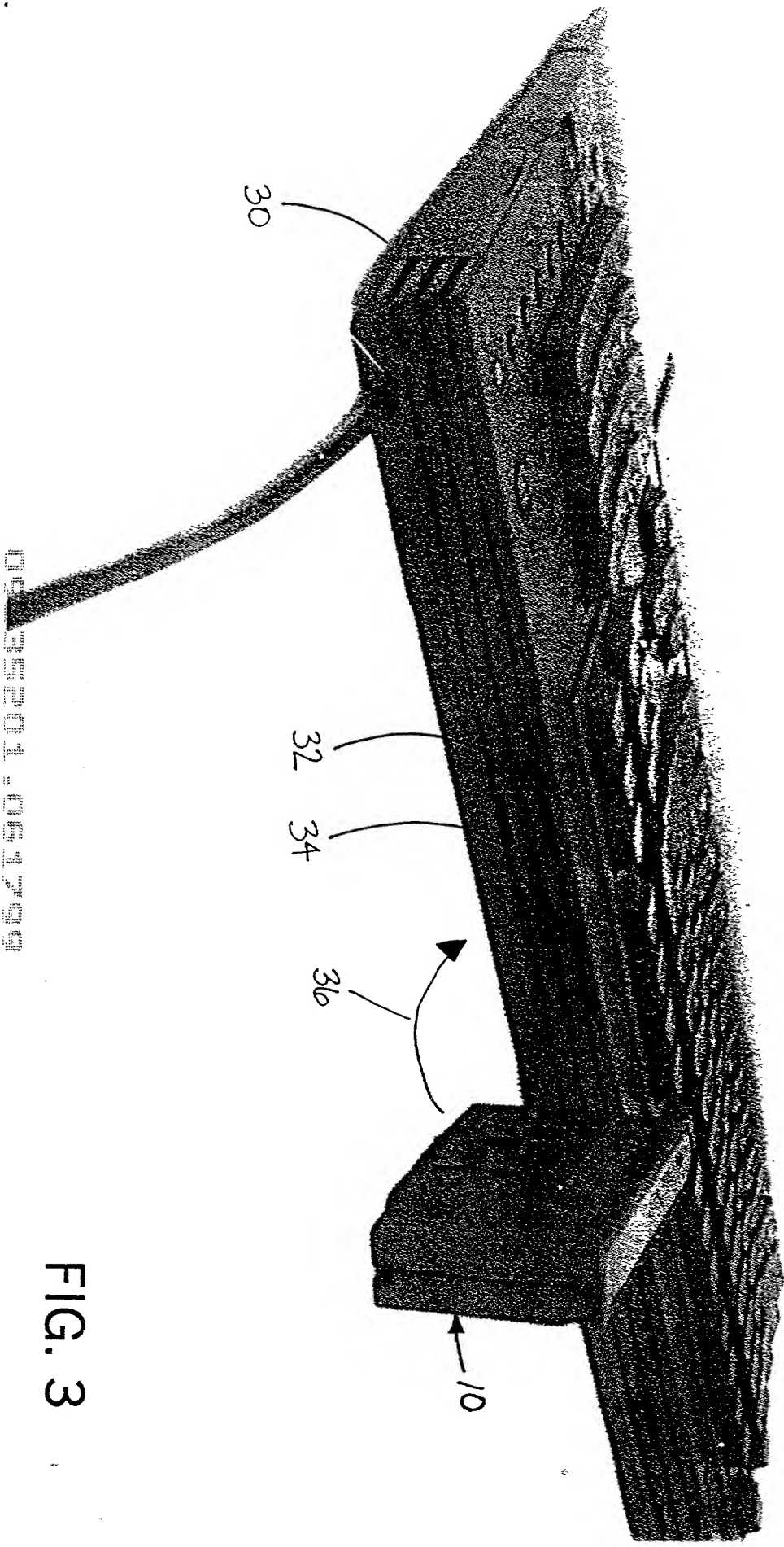
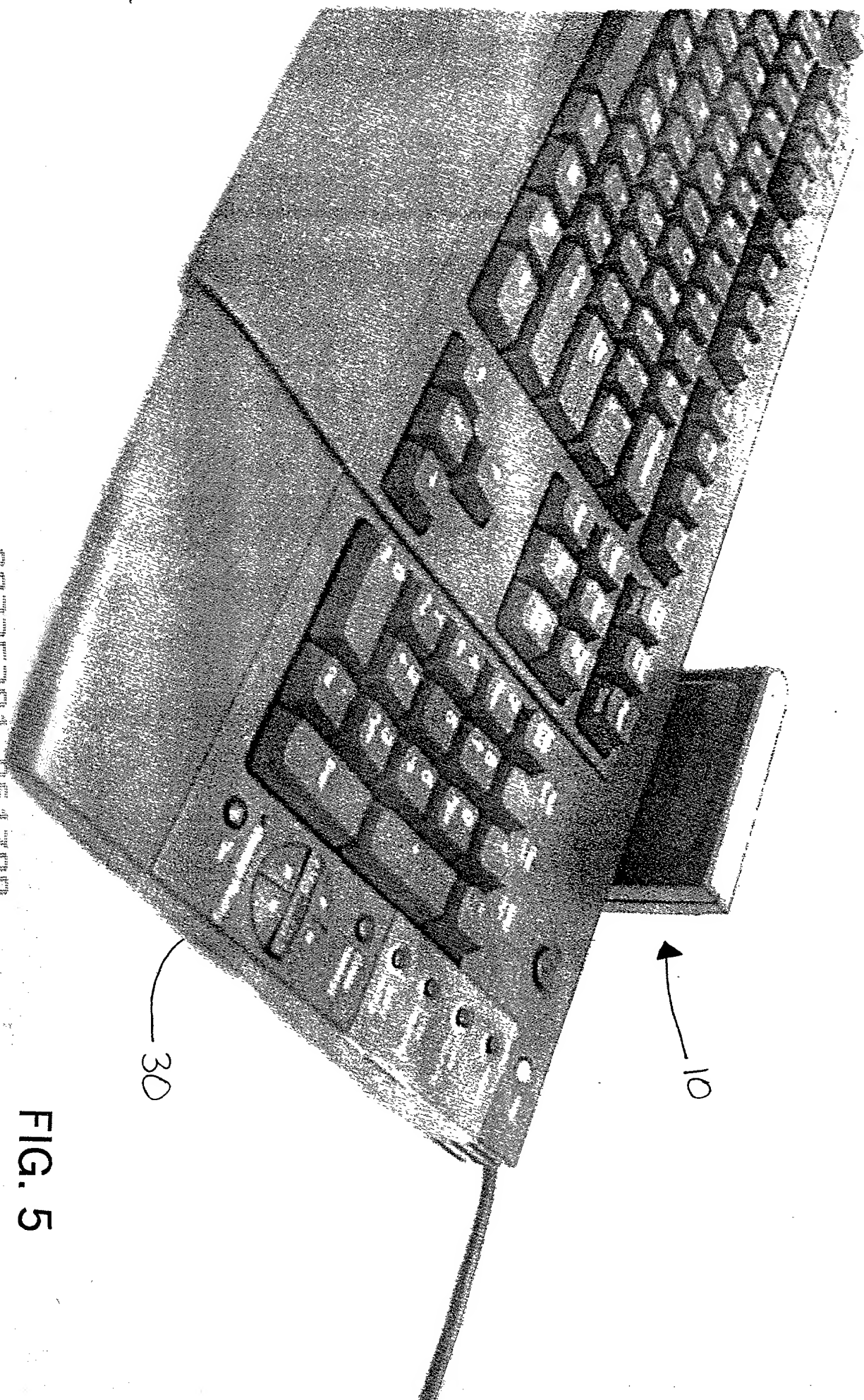


FIG. 3

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FIG. 5

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DOCKET NUMBER: RP9-99-082

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

PC KEYBOARD WITH DETACHABLE SMARTCARD SECURITY DEVICE

the specification of which: (check one)

XXX is attached hereto.

_____ was filed on _____
under Attorney's Docket Number RP9-99-082
as Application Serial No. _____
and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR 1.56.

I hereby claim the benefit of foreign priority under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application the priority of which is claimed:

Prior Foreign Application(s):			Priority Claimed	
_____	_____	_____	_____ Yes	_____ No
(Number)	(Country)	(Filing Date)		

I hereby claim the benefit of United States priority under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in a listed prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose information material to the patentability of this application as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____	_____	_____
(Application Serial #)	(Filing Date)	(Status)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

H. St. Julian	Reg. No. 30,329	Daniel E. McConnell	Reg. No. 20,360
John E. Hoel	Reg. No. 26,279	Anthony N. Magistrale	Reg. No. 35,595
Martin J. McKinley	Reg. No. 31,782	George Grosser	Reg. No. 25,629
Christopher A. Hughes	Reg. No. 26,914	Bernard D. Bogdon	Reg. No. 24,773
Edward A. Pennington	Reg. No. 32,588	Joseph C. Redmond, Jr	Reg. No. 18,753

Send correspondence to Bernard D. Bogdon, IBM Corp., PC Co. Legal Dept., Dept. 9CCA/Bldg. 002-2, Research Triangle Park, NC 27709 and direct all telephone calls to Bernard D. Bogdon at (919) 543-4753.

FULL NAME OF INVENTOR: David W. Hill

INVENTOR'S SIGNATURE: _____ DATE: _____

RESIDENCE: 129 Highlands Lake Drive, Cary, North Carolina 27511

CITIZENSHIP: USA

POST OFFICE ADDRESS: same as residence

FULL NAME OF INVENTOR: Susan Moffatt

INVENTOR'S SIGNATURE: _____ DATE: _____

RESIDENCE: Raleigh, North Carolina

CITIZENSHIP: USA

POST OFFICE ADDRESS: same as residence

FULL NAME OF INVENTOR: Robert E. Springer

INVENTOR'S SIGNATURE: Robert E. Springer DATE: 6.17.99

RESIDENCE: 4116 Olde Coach Road, Durham, North Carolina 27707

CITIZENSHIP: USA

POST OFFICE ADDRESS: same as residence

FULL NAME OF INVENTOR: John D. Swansey

INVENTOR'S SIGNATURE: _____

DATE: _____

RESIDENCE: 110 North Buchanan Boulevard, Durham, North Carolina 27701

CITIZENSHIP: USA

POST OFFICE ADDRESS: same as residence
